Medical Coverage of Games and Events: What’s in the Bag and on the Sidelines??

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Objectives

At the conclusion of this lecture you will:

• Understand the important parts of covering a sporting event/game
• Know how to complete administrative duties, have medical protocols and provide care at events
• Know equipment needs/lists for event coverage – what’s in the bag.
• Feel better prepared for being on the “front line” of sports medicine!
The life of a Team Doc:
Year in Review:
Year in Review:

Tickets To The Packers vs. Vikings Game: $200
Hot Dog and Drink: $8.50
Authentic Vikings Jersey: $50.00
Temporary Tattoo: $3.50

Teaching Your Son To Hate The Packers by Age 5:
PRICELESS
MIAMI!!
Purpose of Medical Team

- Competitor safety
- Injury prevention (education)
- Injury care and rehabilitation
- Triage/Treatment/Transfer
- Meet with your medical team prior to the season/event to make emergency plans
- Know your medical team/coaches/players
- Can be difficult at mass event since athletes don’t know you
ACSM Consensus Statement on Mass Participation Event Management

- Written in 2004 by panel of Team Docs
- Written describing mass event coverage
- Concepts fit for game coverage too
3 major things the Team Physician needs to consider for covering an event:

• Administrative matters for the event

• Medical protocols for providing care and needed supplies

• Hydration and fluid replacement
Administrative

• Have a well developed medical plan
• Plan the set up
  – Shelter, tables, multiple medical sites
• Help reduce load at local ER for mass events
• Triage of injuries
• Course control at mass events
• Need to know numbers of participants for hydration and medical coverage
Event Administration

• Have an agreement on responsibilities between the medical team and organizing body

• Meet with them to discuss mutual plans for the event
  - Important they understand you have the final say in clearing athletes to participate and have the power to DQ

• Organize your Medical Team
  - Who do you need there?
  - Months in advance
  - Give protocols to your team
  - Assign duties
Event Administration

- Know event layout and plan sites of care
  - In mass events beginning/end and along the way
- Arrange for transport of participants
- Communication means
  - Cell phones
  - Walkie Talkies
- Documentation
- Credentials/Shirts
- Notify Hospitals, Police and Fire Dept of event
Event Administration

• Ideal to plan event for when it’s safest in the area
  – Environmental
  – Start time

• Have a hazardous condition plan
  – Cancel or modify for environmental concerns
  – Be able to monitor conditions

• Announce risks and/or changes to participants prior to event

• Be Professional
The Professional Look
Do as I say, not as I do....
Medical Protocols and Care

• Essential care at events:
  – Basic First Aid
  – CPR
  – Event specific medical and musculoskeletal care

• Desirable
  – AED (I’d put in essential at most events)
  – ACLS/ATLS
  – IV Fluids
  – Heat/Cold Care
  – Hyponatremia (endurance events)
Hydration and Energy Replacement

- Event/games need to have fluid available for safe participation
- Food possibly for endurance events
- Fluid:
  - Easily accessible
  - Strategically placed
- General rule
  - 6 to 12 oz of fluid every 15 to 20 min of activity per participant
- Carbohydrate fluids for events > 1 hour
- Keep fluids cool (59-72 degrees F)
- Remember to keep medical team and staff hydrated
- Encourage participants to replace fluid/carbs/sodium post event
What supplies do we need at events and games???

• Number of participants, spectators and staff
• Risk of activity/event
• Availability of other medical care/transport
• EMS response time and ER transfer time
• Level of training of medical staff present
• Knowledge of equipment present – don’t have something you don’t know how to use!
Who carries what?

• Athletic Trainers
  – Carry many things to prevent and treat injuries and problems in the athlete.
  – Will have some duplication with others.
  – Generally shouldn’t carry and dispense meds.
  – What is present depends on setting and event.
  – At many levels keep track and stock needed supplies.
Who carries what?

- **Paramedics**
  - Emergency supplies for stabilization and transport.
  - Hospital communication.
  - Good capacity to carry equipment with rigs.
  - Are they at your game or do you need to call?
  - What supplies do you need for stabilization if they aren’t present.
  - Know who, where they will be, where they are transporting and how they will be activated.
  - Often take over scene when activated.
  - Conflicts can be avoided by familiarity with each other.
Who carries what?

- Physician
  - Supplies usually carried in the Game Bag
  - Something all Team Docs should have
  - We will discuss contents......
Types of Supplies

- Comfort Care
- Preventative braces
- OTC Meds
- Prescription Meds
- Evaluation tools
- Stabilization equip
- Emergency Supplies
- Documentation

- Can have overlap of who is carrying what
- Better to be over stocked
- Have a plan prior to the event
Airway

• Must be able to access the airway of the helmeted athlete
• Mask Removal – tools
  – Trainers Angel, Anvil Pruners and/or electric screw driver
  – Practice removal!!!
• In most cases leave helmet/pads on
• Assume neck injury in head injured/unconscious athlete (C-spine)
• Remove full mask for access
• Airways
  – Often occurs once EMS arrives
  – NFL requires separate Airway staff
Breathing

- Face Shield
- Pocket Mask
- Ambu Bag
- Oxygen
Circulation/Cardiac Arrest

- Ventricular Fibrillation
- Commotio Cordis
  - Baseball
- Early defibrillation – the key to survival
- More likely a spectator or coach than athlete
  - Elderly at the event greatest risk at times
- AED – Automatic External Defibrillator
  - Know how to use.
  - Know where closest one is at the event.
Defibrillation

- Survival decreases 7-10% for every minute delay
- After as few as 10 minutes few attempts are successful!
- Many success stories with early defibrillation
The Role of AEDs in Athletics
Rothmier and Drezner
Sports Health Jan/Feb 2009

• Context
  – Sudden Cardiac Arrest
    • Leading cause of death in young athletes

• Review article to summarize AED use in athletic event planning
Evidence Acquisition

• Studies reviewed in this article
  – AED use
  – Early Defibrillation
  – Public access defib programs
  – Also reviewed consensus guidelines and position statements
Etiology

- SCD in athletes
  - Underlying structural cardiac abnormalities
    - HCM
    - Coronary artery anomalies
    - Commotio Cordis
    - ARVD
    - Valvular disease
    - Myocarditis
    - Arrhythmias
Results

• Early defibrillation programs and access to AED’s
  – Demonstrate a survival benefit for SCA in public and athletic settings

• Survival still poor
  – Key is time from collapse to AED
  – 7-10% decrease in survival per minute

• US Commotio Cordis Registry
  – 16% survival rate

• Drezner
  – 486 cases reviewed in youth sports
  – 11% survival rate
Conclusion

• Schools and Events
  – Should implement use of AEDs and emergency action plans
  – In collapsed and unresponsive athletes cardiac arrest should be suspected and AEDs applied ASAP
Pocket Supplies

• Things to have handy
  – Gloves
  – Pocket mask/Pen light
  – Gauze/bandages
  – Scissors
  – Multi-tool
  – Mask removal
  – Aspirin
  – Oral glucose
  – Albuterol MDI
Medical Bags

- Local/Online
- Soft sided
- Tackle box
  - Tackle trays
- Wheeled
- Back Pack/Fanny Packs
- Pockets
Types of Game Bag Supplies

- **Wound Care**
  - bandages/gauze/ointment

- **Preventative**
  - braces/tape

- **Evaluation tools**
  - scopes/pen light/bp cuff/thermometer

- **Medications**
  - OTC/Prescription meds/Prescription pad

- **Orthopedic**
  - braces/injection/crutches

- **Emergency (on site at least)**
  - airway/AED/meds/transport
Wounds

• Bandages/Gauze/dressings
• Wraps
• Suture kit
  – Anesthetic
  – Suture
• Other
  – Staples
  – Dermabond
  – Monsel’s
  – Antibiotic ointment
Orthopedic Issues

• Contusions
  – Ice/bags
  – Plastic wrap
  – ACE bandages
  – Instant cold packs
Orthopedic

- Splints
  - Cardboard/wood
  - SAM
  - Air
  - Vacuum
  - Fiberglass
  - Pre-made/Custom
  - Slings

- Difficult to pack vs cost
Orthopedic

- Slings
- Cervical Collar
- Backboard – school/EMS
- Crutches
- Specific Braces

- Potential for overlap of emergency supplies with EMS
Optho

- Eye tray
  - Flourescein
  - Cobalt blue light
  - Anesthetic drops
  - Antibiotic drops
  - Eye pads
  - Opthalmascpe
Ear

- **Ear tray**
  - Otoscope, Speculum, Insufflator
  - Drops (anesthetic, debrox), Irrigation

*Figure 4. An eye kit (A) and an ear kit (B) for assessing injury and removing foreign bodies.*
Dental

- Dental tray
- Extra mouth-guards
- Saline Containers
- Hemostat/pliers
- Laceration repair equipment
- Antibiotics
- Pain Medication
Special Needs

- Depends on type and length of event

- May need more if you are on the road and covering the travel party
  - Foreign travel
  - OTC meds
  - Antibiotics
Special Needs

- Other Instruments (depends on event)
  - Scissors
  - Hemostats
  - Scalpels
  - Nasal packing/rockets
  - Different suture materials
  - IV equipment - important
  - O2 Sat monitor
  - Glucometer
Medications

• Lots of controversy!!
  – Dispensing laws
  – Dispensing to minors, even if OTCs
  – Record keeping
  – Expired meds
  – Cost
  – Travel medications – Medication team box
  – Huge issues have come up with traveling with meds in NFL this season!
Medications

• Over the counter meds for:
  – Pain/Fever
  – Diarrhea
  – Constipation
  – Asthma – inhalers (player and medical provider)
  – Allergy – histamine blockers/epi-pen
  – Aspirin
Medications

• Pain
  – NSAIDS
  – ASA
  – Acetaminophen
  – Narcotics
  – Oral and/or injection
Medications

- **International travel**
  - Anti-diarrhea
  - Infectious disease – antibiotics
  - Immunizations – prior
  - Be ready with enough equipment for your trip!
  - Understand rules for transporting meds via plane to other countries.
Medications

- Cardiac
  - Should strongly consider ACLS training!
  - MI meds
    - ASA
    - Nitro
    - O2
    - Pain meds
  - ACLS meds – EMS
Documentation

- Very important
- Some Type of Simple “SOAP” Form
- Dictation
- Pharmacy dispensing records
Dress Code at Events

• You are a professional!
• Lots slacks and polo combos
• Think of weather conditions
• Identify as medical team at mass events
Conclusion

- Prepare for administrative matters, medical protocols, provision of care and fluid issues prior to the event you’re covering.
- Know what/where things are in your bag.
- Different events and team coverage requires different supplies.
- Create an inventory of your medical supplies – keep up to date.
- Being ready makes the game/event more fun!!
- Great list of supplies on the ACSM consensus statement for mass participation event coverage.
Thank You!!
Bibliography

- Rothmier, Drezner: The Role of AEDs in Athletics. Sports Health Jan/Feb 2009